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THE CONCEPT OF TRANSITION SYSTEM

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THE CONCEPT OF TRANSITION SYSTEM

Abstract

The term 'transition system' describes features of a country's institutional arrangements which shape young people's education-work transitions. It explains why national differences in transition processes and outcomes persist despite apparent pressures for convergence. This paper asks how the concept of transition system has been conceptualised and operationalised by researchers, especially quantitative researchers analysing comparative survey data. It uses a four-level conceptual framework which is implicit in much of this research. Micro-level transition processes and outcomes (level 1) may be aggregated or summarised to show national transition patterns (level 2), which may be explained in terms of dimensions of national institutional variation (level 3) or typologies of transition systems (level 4). Research into transition systems can boast of empirical, theoretical and policy-related achievements, but it has been constrained by data limitations and theoretical eclecticism. It needs to develop theoretical frameworks to explain how transition systems themselves change and to move beyond a view of nation-states as homogeneous and independent units of analysis.

Introduction

Despite pressures for cross-national convergence arising from modernisation, globalisation and shared policy discourses, the processes and outcomes of education-work transitions continue to vary widely across countries. These variations cannot all be attributed to differences in the countries' economies or to compositional differences in young people's social or educational backgrounds. At least in part they reflect different institutional and structural arrangements, for example in education and the labour market, which create different national 'logics' and result in different patterns of transition. These national differences are systematic, in the sense that countries may be classified along dimensions of institutional variation or grouped into types, and these dimensions or types are associated with different patterns of transition.

Researchers have used terms such as 'transition systems' (Rosenbaum *et al.*, 1990), 'institutional effects' (Müller & Shavit, 1998), 'dimensions of societal variation' (Kerckhoff, 2000), 'co-ordination regimes' (Hillmert, 2002) and 'institutional filters' (Blossfeld *et al.*, 2005) to describe these national differences and their consequences. Several researchers have focused on education and training systems as their main source (eg Allmendinger, 1989; Hannan *et al.*, 1996). However, the institutional and structural factors which shape transitions are broader than education and training; they include the organisation of labour markets as well as contextual features such as social welfare systems and family structures. In this paper I use the term 'transition system' to express this broader concept.⁽¹⁾ Following the project on *Comparative Analysis of Transitions from Education to Work in Europe* (CATEWE) I define a transition system as 'the relatively enduring features of a country's institutional and structural arrangements which shape transition processes and outcomes' (Smyth *et al.*, 2001: 19).

In this paper I consider how transition systems and kindred concepts have been conceptualised and measured in comparative research. Most researchers who have studied transition systems have used comparative analyses of survey data. My review therefore focuses on quantitative survey research, rather than the various qualitative traditions in transition research which have less often compared countries and have rarely used system concepts for doing so. It draws especially on work associated with the European Research Network on *Transitions in Youth*, established in 1992 by teams working on national transition surveys who wished to promote their use for cross-national comparisons (Raffe, 2001; Grelet & Smyth, 2005). Several Network members participated in the CATEWE research project, which analysed data from national surveys and from the European Labour Force Survey (ELFS) in order to identify the characteristics of transition systems which shaped transitions (Smyth *et al.*, 2001; Müller & Gangl, 2003). Hannan *et al.* (1996) reviewed the comparative literature and proposed a conceptual framework which informed the OECD's (2000) Thematic Review of *The Transition from Initial Education to Working Life*, and was subsequently built on by the CATEWE project. This paper further updates that review and takes stock of the strengths and limitations of the research and of the concept of transition system.

Theoretical interest

Research on transition systems is of theoretical interest in at least three respects. In the first place, the persistence of different national transition patterns challenges

predictions of convergence made by theories of industrialisation, the new institutionalism or globalisation (Müller & Shavit, 1998). The research supports a transformationalist view of globalisation in which 'nation-states have not lost their significance, but are facing a more general transformation' (Mills *et al.*, 2005, p. 438).

Second, research on transition systems draws on, and extends, the tradition of societal analysis pioneered by Maurice *et al.* (1986). The societal approach emphasises the holistic interrelationships among different social and economic institutions, including education and training, the labour market and industrial relations systems, the production system, family structures and cultures, and so on. These interrelationships generate different national 'logics' and a degree of coherence within each country. The concept of transition system is cognate with other system concepts influenced by the societal approach, such as production system, skill acquisition system and skill diffusion system (eg Ashton *et al.*, 2000; Brown *et al.*, 2001).

Third, the research tests and informs a wide range of theoretical perspectives which researchers draw on in order to classify and analyse transition systems. These include theories of social stratification and social reproduction, labour-market segmentation, networks, human capital, signalling and insider-outsider theories. For example, Marsden's (1986) models of segmentation are used to distinguish systems dominated by occupational and internal labour markets respectively, and Rosenbaum *et al.* (1990) characterise national transition systems on the basis of the role of markets and networks within them. However, as a result of this diversity of perspectives transition-system research often appears theoretically eclectic and fragmented.

Policy interest

The concept of transition system is similarly relevant to policy interests. It has at least three distinct uses or purposes in policy analysis.

Transition system as the policy variable. The first purpose is to identify features of 'successful' transition systems which national policy-makers should introduce or strengthen in their own countries. Examples include the long-running debates over the relative effectiveness of dual and school-based systems of vocational training, or of different modes of labour-market regulation, in ensuring smooth transitions. This purpose typically leads analysts to search for specific dimensions of transition systems which are associated with successful transitions (level 3 of the conceptual framework described below).

Transition system as the context of policy. The second purpose is not to compare the effectiveness of alternative institutional arrangements or policy interventions but rather to identify types of systems within which different interventions may be effective. A policy which works in one system will not necessarily work in another, but it is more likely to work in another system of the same type. Countries with the same type of transition system can more easily learn from each other and provide mutual benchmarks for each others' performance. This purpose typically leads to the development of typologies of transition systems (level 4 of the framework below).

Transition system as heuristic. The third purpose uses dimensions and typologies of transition systems, not as precise descriptions of particular countries, but rather as ideal types of the 'logics' whose different combinations within national systems make

each country unique. The purpose is not to identify more or less effective policies, even within a particular context, but rather to help policy-makers to understand their own system's logic for which specific policies must be designed.

Data Sources

Comparative research on transition systems needs comparable micro-level data on the processes and outcomes of transitions of cohorts of young people in different countries. The research reviewed below has used four main sources of such data:

National transition surveys, brought together for comparison. These are the most common sources of data for transition system research. Their main limitations arise from their lack of comparability; national surveys vary widely in their purpose, design and content, partly as a result of the very institutional differences captured by the concept of transition system. As a result, comparisons tend to be based on a limited subset of common data and to cover a small number of countries.

General-purpose cross-national surveys. Examples include the ELFS and the European Community Household Panel (ECHP) Survey. These provide comparable data covering large numbers of countries, but they typically collect limited data on education-work transitions, or have design features (such as all-age samples) which make them less suited for the analysis of transitions (Müller & Gangl, 2000).

Purpose-designed cross-national transition surveys. Examples include the CHEERS and REFLEX studies of higher education graduates (Schomburg, 2007) and the surveys of eastern European countries by Roberts (2006) and colleagues. A partial example - where transition research is only one purpose among many - is the ELFS, which carried a module on education-work transitions in 2000 and will do so again in 2009 (Kogan & Müller, 2003). Purpose-designed surveys can be planned to avoid the limitations summarised above, but they are expensive and they raise difficult design questions, typically having to balance comparability with the need for research designs that reflect distinctive national transition sequences (Raffe, 2000).

Cross-national qualitative studies. Young people's agency and aspirations have been explored in comparative studies which have typically linked survey and qualitative methods (eg Bynner & Roberts, 1991; Behrens & Evans, 2002). Such studies tend to be area-based and rarely cover more than two countries.

The limitations of these data sources cast a long shadow over the research on transition systems, as we see below. In addition to these micro-level data sources, the research requires macro-level information on national institutional and structural arrangements in order to classify transition systems. Macro data are rarely mentioned in discussions of comparative transition data, but their limitations are at least as significant for the progress of transition research as those of micro data. This is discussed further below.

A Conceptual Framework of Transition Systems

Much of the research on transition systems rests, at least implicitly, on the conceptual framework summarised in Figure 1. This comprises four levels of analysis:

1. *Individual transition processes and outcomes.* These comprise the processes and outcomes of transition, measured at the level of the individual young person. They include experiences and outcomes of education, movements between different educational and labour-market statuses, labour-market processes such as job search and recruitment, and labour-market outcomes such as (un)employment, occupation and earnings.

2. *National transition patterns.* These are aggregate patterns of processes and outcomes at national level. They include national averages and distributions (such as average earnings or unemployment rates), relationships between key parameters (such as education and occupation), and inequalities.

3. *Institutional and structural dimensions of transition systems.* These comprise features of the labour market, the education and training system and other aspects of a national transition system, represented as macro-level variables or dimensions (for example the standardisation and stratification of education systems, and the relative strength of occupational and internal labour markets).

4. *Typologies of transition systems.* Transition systems may be grouped into 'types', either by cross-classifying them on selected institutional and structural dimensions from level 3 above, or on the basis of national transition patterns (constructed, for example, using cluster analysis on the aggregated micro data used in level 2 above).

[Figure 1 about here]

This framework distinguishes between individual transition processes and outcomes, which are purely 'micro' phenomena (level 1), and the national transition patterns which these create at the 'macro' level of a transition system (level 2). It also enables us to distinguish between inductive approaches which distinguish transition systems purely on the basis of the transition patterns they produce (level 2) and approaches which use theoretically-informed dimensions or types to predict these patterns (levels 3 and 4). It also distinguishes between a dimensions-based approach and a typology-based approach to transition systems: that is, between an approach which characterises transition systems in terms of several dimensions (level 3) and one which compares types of systems (level 4).

In the following sections I use the four levels of the conceptual framework to review the main concepts, variables and approaches which researchers have used for the study of transition systems.

Level 1: Transition Processes and Outcomes

Most within-country analyses of transition focus on what I call transition processes and outcomes, measured at the micro level. Examples include:

Educational experiences and outcomes, such as the content, mode and institution of learning, the highest level of qualification, the field of study, other curricular experiences such as career education, and skills, competences and 'soft' outcomes of education.

Transition processes, such as job search, information and guidance, and recruitment methods.

Labour-market outcomes, such as (un)employment, security of employment, occupation, earnings, training, the opportunity to use skills and subjective outcomes such as job satisfaction.

Transition dynamics, such as the time taken to find a ‘stable’ job, flows within the labour market (between employment and unemployment, job-changing, occupational mobility), flows between the labour market and education/training and dual statuses combining learning and work.

Transitions in other domains, such as family, housing, health and life styles.

Most transition researchers favour a broad, holistic concept of transition which relates to whole cohorts of young people, covers the full sequence of educational, labour-market and related transitions (starting from the point where educational pathways begin to diverge and ending when young adults have achieved relatively stable labour-market positions), includes reverse transitions from labour market to education and overlaps between learning and work, and relates educational and labour-market transitions to other transitions to adulthood such as family and housing transitions. However, researchers comparing transition systems are often constrained to use narrower and more linear concepts of transition because of the limitations of comparative data summarised above. I discuss the implications in the next section.

Level 2: National Transition Patterns

The next level in the conceptual framework moves our focus from the micro to the macro. At the level of a transition system, micro-level transition processes and outcomes form transition patterns which may vary across systems. These include:

Aggregate transition processes and outcomes. Individuals’ transition processes and outcomes may be aggregated to produce national averages or distributions, such as unemployment rates or occupational distributions, which vary across transition systems.

Associations, especially between education and labour-market outcomes. For example, the labour-market returns to vocational compared with general qualifications (Müller & Shavit, 1998; Gangl, 2003b) and the match or mismatch between the field of training and the occupation entered (Wolbers, 2003) may vary across transition systems.

Inequalities. Transition systems may similarly vary with respect to structured inequalities such as gender, social class and ethnicity (Müller & Shavit, 1998; Smyth, 2005).

Labour-market integration. Comparisons of aggregate transition outcomes such as youth unemployment rates cannot easily distinguish the effects of the buoyancy of a country’s economy from other effects of its transition system. Several studies have addressed this issue by comparing the labour-market

statuses and transition patterns (such as unemployment rates) of workers who vary in labour-market experience or 'seniority'. The smaller the difference between new entrants and established workers, and the more quickly this difference disappears with labour-market experience, the smoother and faster the process of labour-market integration (CEDEFOP, 2001; Couppié & Mansuy, 2003; Gangl, 2003a).

Transition-system research has substantially expanded our knowledge of how national transition patterns vary across countries. It has revealed wide variation not only in youth unemployment rates but also in the speed of labour-market integration, in the relative labour-market prospects of qualified and less-qualified entrants, in the frequency of dual statuses combining learning and work and in social inequalities. Space prevents a detailed summary of these findings. The main limitations of the research arise from the restricted concept of transition that is supported by existing comparative data. With a few exceptions (notably Blossfeld *et al.*, 2005) transition-system research has not connected with comparative research on family, housing, health and life-style transitions. Few comparative studies have included direct observations of employer behaviour. Little attention has been paid to skills and competences, except as these are measured by educational qualifications. Inequalities in transition have been under-researched, because few cross-national datasets hold comparable data on ethnicity or socio-economic status.

Above all, comparative transition-system research tends to be based on a short longitudinal span. It is therefore ill-placed to study the 'temporal dimension' on which transition systems may differ (Hillmert, 2002, p. 678). In the first place, the research has focused largely on transitions into and within the labour market and has not connected closely with research on transitions within the educational system. Conversely, studies of participation in education and training and of transitions from secondary to tertiary education (eg OECD, 1998) have been separate from studies of labour-market entry. And there has been little comparative research on 'yo-yo' transitions from education to the labour market and back again (Walther *et al.*, 2005). Second, the research tends to cover only the early stages of entry to the labour market, and sometimes focuses even more narrowly on the first job (eg Müller & Shavit, 1998). As a result, it not only compresses the duration of the transition process, it also faces problems in finding comparable measure of 'first job', as this needs to be defined in relation to institutional arrangements - especially for dual statuses such as apprenticeship which combine work and learning - which are nationally distinctive (Kerckhoff, 1995). A few researchers have attempted to compare more prolonged labour-market itineraries. Hillmert's (2002) analysis of British and German panel data used a life-course perspective to compare young people's flows into, and out of, their first job, and their first stable job. Scherer's (2001) study, also comparing Britain and Germany, used optimal matching techniques with household panel data to generate 'career sequences' for the first five years after leaving full-time education. The sequences were defined differently in the two countries (for example, some of the British career sequences included training schemes which did not exist in Germany) but they were similar enough for the two countries' distributions of sequences to be compared. Brzinsky-Fay (2007) applied a similar approach to ECHP data for ten European countries, comparing their distributions across eight theoretically-derived sequence types. This type of approach is still rare, but it may become more common as household panel data become more widely available. A possible next step is to

apply it to the whole transition process, including the earlier stages when educational pathways diverge and when young people choose between continued education and entry to the full-time labour market.

Many comparisons of national transition patterns, including the cross-national indicators produced by OECD and Eurostat, are essentially descriptive in purpose: they describe how transition patterns differ across countries. Most transition-system researchers, however, aim to explain the differences they find, and their approach may be inductive or deductive. An example of an inductive approach is the CHEERS study of transitions from higher education. This identified different transition patterns and then looked for explanations of distinctive national patterns in terms of ‘certain characteristics of the higher education system or the professional values and the social fabric’ (Teichler, 2007, p. 20). In terms of our conceptual framework, the inductive approach stops at level 2, the analysis of national transition patterns. The explanations that it seeks are likely to be nationally specific and to lie outside our framework. The deductive approach, exemplified by the CATEWE project, compares national transition patterns in order to test the hypothesised effects of particular differences between transition systems. These differences are represented by the next level of our conceptual framework.

Level 3: Institutional and Structural Dimensions

Institutional and structural dimensions of transition systems are the ‘independent variables’ used to predict national transition patterns. The main dimensions used by transition-system researchers describe labour-market structure, education systems and the linkages between the two.

Two dimensions of labour-market structure have been used very widely in comparative analyses of transitions:

Occupational v internal labour markets. The first is the distinction between occupational labour markets (OLMs) and internal labour markets (ILMs) as the dominant national form of labour-market organisation. The labour-market integration of new entrants tends to be faster in OLMs than in ILMs. Some approaches include secondary or competitive labour markets as a third category. This distinction draws on theories of labour-market segmentation of Marsden (1986) and Garonna and Ryan (1991), who in turn draw on Maurice *et al.* (1986).

Labour-market flexibility and regulation. The second dimension is labour-market flexibility or (conversely) the strength of employment protection and other forms of labour-market regulation (van der Velden & Wolbers, 2003; Breen, 2005). Blossfeld *et al.*'s (2005) distinction between open and closed employment relations systems is similar but broader. Young people in tightly regulated labour markets may experience more difficult transitions but enjoy more stable employment once they find it. However, the forms of regulation may differ for young people and adults: there may be ‘flexibly regulated’ channels for integrating young workers (Gangl *et al.*, 2003, p. 287).

A second group of dimensions describes features of the education and training system.

Standardisation. Allmendinger's (1989) seminal comparison of Germany, Norway and the US introduced two widely used dimensions: standardisation and stratification. Standardisation refers to the uniformity of standards, for example with respect to curricula and school-leaving qualifications, across an education system. Transitions are smoother in standardised systems because employers can rely on the information in (standardised) certificates and new entrants do not need repeated job changes to achieve a good match.

Stratification. Allmendinger (1989, pp. 234-5) defined stratification as 'the proportion of a cohort selected to attain the maximum number of school years provided by the system. The higher this proportion is, the less stratified is the educational system.' Other authors use different definitions. Müller and Shavit (1998, p. 6) defined stratification as 'the extent and form of tracking at the secondary educational level'; however, they identify an additional dimension, the proportion of the age group who achieve qualifications in tertiary education, which is similar to Allmendinger's definition of stratification. The CATEWE study distinguished tracking from 'outcome differentiation', the extent to which attainment was differentiated through grades (Smyth *et al.* 2001, p. 21).

Educational pathways. A third set of educational dimensions refers to the characteristics of educational pathways, especially at the upper-secondary level. They include:

- *size of vocational pathway:* the scale of participation in vocational compared with general education;
- *nature of vocational pathway:* for example, whether this is primarily school-based, work-based or 'dual' (Blossfeld *et al.*, 2005) or the scale of apprenticeship. Systems with large apprentice-type pathways tend to have more successful transition outcomes, although the reasons for this are contested (Ryan, 1999);
- *occupational specificity:* the extent to which vocational education and training equip young people with skills for a particular occupation;
- *relationship between general and vocational pathways:* the extent of common content, assessment and certification arrangements and the ease of transfer between pathways.

Institutional linkages. Hannan *et al.* (1996) argued that the strength of the institutional linkages between education and the labour market was a key dimension of transition systems. Iannelli and Raffe (2007) suggest that in systems with strong linkages vocational education follows an 'employment logic', and in systems with weak linkages it follows an 'education logic'. In countries with strong linkages employers or trades unions have a larger role in the design, updating, delivery and assessment of vocational programmes, there is frequent contact and communication between educational and labour-market institutions, and labour-market signals to education are strong and clear. Such countries also have strong institutional networks which can support transitions from education to work. Linkages thus influence transitions through the content of education/training and its relevance to employers, the clarity and

credibility of signals between education and the labour market, and school leavers' access to recruitment networks.

The labour-market and educational dimensions described above have stood the test of time, in the sense that successive studies have confirmed their importance. However, researchers might have come up with a different - and larger - set of dimensions if they had been able to study a wider range of countries and to implement a broader concept of transition. (Conversely, the OLM/ILM distinction might have received less attention had Germany not been included in so many of the early studies.) Several dimensions are under-represented in current transition-system research, but are recognised by researchers and analysts as important.

The broader economic environment. This includes the stage of economic development, the strength of the economy, the exposure to the international economy and the size of the informal and family economies.

Family and cultural factors. In countries with strong extended family networks job search may be prolonged, because young people can rely on family support, but young women may face starker choices between family and career goals (Iannelli & Soro-Bonmatí, 2003; Blossfeld *et al.*, 2005). Other under-explored cultural factors include religion and attitudes to household and geographical mobility.

Compulsory military/national service. Some national studies - for example Kraus *et al.* (1998) on Israel and Tsai (1998) on Taiwan - suggest that military service may affect both the process and outcomes of transition. It may, for example, affect gender differences by interrupting the transitions of young males only and by giving them an alternative route to occupational skills.

Career education and guidance. The OECD (2004) review of career guidance found 'very limited evidence' on the long-term outcomes of career guidance and even less evidence about newer forms of delivery. To my knowledge, there has been little research to compare the impact - as opposed to the philosophy or organisation - of different national models of career education or guidance.

Youth programmes. An exploratory study by Schröder (2000) used CATEWE data on five countries to demonstrate that the objectives, scale, organisation and target groups of youth employment and training programmes varied in relation to labour-market flexibility and the linkages between education and the labour market. Few other studies have examined youth programmes in relation to transition systems.

The last three of these features of transition systems could be changed in the relatively short term through policy decisions. Empirical studies have shown that transition systems can change, often over a short period. The development of vocational education and training in Ireland changed the character of the country's transition system (Smyth *et al.*, 2001). Transition systems in central and eastern Europe changed substantially over a relatively short period, reflecting social and economic changes in the transition economies (Kogan & Unt, 2005). The GLOBALIFE project

similarly documents rapid change in the employment relations systems of Ireland, Hungary, Estonia and Mexico (Blossfeld *et al.*, 2005). I discuss the stability and policy-dependence of transition systems later in this paper.

Transition-system researchers have used a variety of approaches to classify or measure countries in terms of institutional and structural dimensions. These include:

- available indicators, such as indicators of employment protection legislation used to measure labour-market regulation;
- classifications based on features of the institutional context, such as the selective/comprehensive nature of secondary schools, or the proportion achieving the highest educational level (used to measure stratification);
- 'expert' judgements, typically of the researchers themselves or of each country's representative in international research teams;
- backwards inference from data on national transition patterns, theoretically selected to reflect the hypothesised effects of particular dimensions such as the OLM/ILM distinction;
- conclusions of earlier research.

The classification of countries in terms of institutional and structural dimensions is one of the weakest, or at least the most arbitrary, features of research on transition systems. One issue is that many 'dimensions' are in fact multi-dimensional. Concepts such as the stratification of education systems or the linkages between education and the labour market can be defined and interpreted in several different ways. Another issue is the internal heterogeneity of systems. The dimensions approach assumes that an entire transition system can be placed at a single point along each dimension, whereas actual systems may be very diverse. National labour markets may include segments that are organised as OLMs and other segments organised as ILMs, standardisation may vary across different levels or sectors of education, and linkages between education and the labour market may vary across occupational sectors and educational programmes within a country. Education systems are often classified on the basis of their upper-secondary vocational programmes; classifications based on general and/or tertiary education might produce different results.

So far we have treated dimensions of transition systems as independent. However, dimensions may be related, empirically and theoretically. For example, transition systems where OLMs are dominant tend also to have large apprenticeship systems, occupationally specific training and strong linkages between education and the labour market. These inter-relationships may be reflected in typologies of transition systems, which constitute the fourth level of the conceptual framework.

Level 4: Typologies

Dimensions may be combined to produce typologies of transition systems or, if the dimensions are all closely related, a single over-arching dimension. The review by Hannan *et al.* (1996) concluded that three dimensions were particularly important: standardisation, stratification and the strength of linkages between education and employment. Most countries clustered on the diagonal of the matrix defined by these dimensions. Much of the variation in transition systems could, it seemed, be expressed in terms of a single dimension or broad continuum.

Other analysts have similarly identified a single over-arching dimension but expressed this as a dichotomy. The interim report of the OECD's Thematic Review identified two types of countries: those with institutionalised, holistic vocational education pathways more tightly connected to occupationally organised labour markets, with safety nets for those who fall through the cracks; and countries with 'relatively open labour markets that value generic employability attributes, rather than specific occupational qualifications' (OECD, 1999, p. 19). Heinz (1999, p. 19) interpreted comparisons of Canada, Germany, the US and the UK in terms of a contrast between transition systems with 'formalised training arrangements that are connected with an occupationally centered labor market' and systems based on 'comprehensive schools and liberal arts colleges that at best have weak linkages to the labor market'. And Kerckhoff (2000) contrasted 'Type 1' societies, with stratified and standardised education systems offering progressive specialisation into occupationally specific streams, with little opportunity to change direction, and 'Type 2' societies where education systems were less standardised, less stratified and more flexible, and where the linkages between education and the labour market were much weaker. In all these contrasts, Germany was an example of the first type, and the US of the second type, with countries such as France and the UK in between.⁽²⁾ Both types have strengths and weaknesses. Many researchers, especially those working in the European traditions described below, stress the beneficial effects of Type 1 societies on smooth transitions and rapid labour-market integration. Others argue that Type 2 societies engender optimism, a sense of agency and skills of career management (Bynner & Roberts, 1991; Arnett, 2006). Mortimore and Krüger (2000, p. 493) note that the 'loosely coupled' (Type 2) arrangements in the US allow changes of direction and 'foster an active entrepreneurial orientation towards work ... and a sense of optimism about future prospects'.

European researchers have developed similar dichotomies based on the OLM/ILM distinction and the related distinction between qualification space and organisational space, developed by Maurice *et al.* (1986) from their comparison of workplaces in Germany (OLMs, qualification space) and France (ILMs, organisational space). The two types of space defined different 'logics' which governed such things as the recruitment, training, deployment and mobility of workers. Maurice *et al.*'s approach has influenced numerous comparative studies of transition (eg Ashton & Lowe, 1991; Ryan *et al.*, 1991; CEDEFOP, 2001; Müller & Gangl, 2003). Müller and Shavit (1998) used four institutional dimensions to operationalise Maurice *et al.*'s distinction: standardisation, stratification, vocational specificity and the size of the tertiary sector. OLM systems (qualification spaces) tend to require highly standardised, vocationally-specific qualifications which are typically delivered through apprenticeships and which reflect and reinforce strong linkages between education and the labour market. As a result there is a strong correlation between qualifications and school-leaver employment and transitions are relatively smooth. New entrants' standing in the labour market is defined by their qualified status rather than by their lack of seniority as in ILM systems; they quickly converge towards 'adult' patterns of employment and experience low rates of occupational or career mobility. Employment regimes in OLM systems tend to be based on the security of employment and are compatible with a degree of market regulation. Using data on education and first occupation for 13 countries, Müller and Shavit concluded that Germany, Switzerland and the Netherlands were qualification spaces (OLM countries) and the US, Australia, Britain, Ireland and Japan were organisational

spaces (ILM countries). The remaining countries in their sample - France, Italy, Israel, Sweden and Taiwan - were mixed.

Müller and Shavit's study tested typologies empirically on the basis of their capacity to predict differences in national transition patterns. Other such tests have tended to confirm the existence of a distinctive category of OLM countries which includes Austria, Germany, Switzerland and (in many studies) Denmark and the Netherlands; some studies also allocate other Nordic countries to this category. However, research has failed to find an equally distinct category of ILM countries. It is significant that Müller and Shavit classified France, the inspiration for Maurice *et al.*'s 'organisational space', as an intermediate or 'mixed' case. The CATEWE project identified three categories - OLM countries, southern European countries and others - among the current 15 EU member-states (Smyth *et al.*, 2001; Müller & Gangl, 2003). It concluded that the third category - of countries which were neither OLM systems nor southern European - was the most heterogeneous. CEDEFOP's (2001) key data on vocational training in the EU presented a classification which, like the CATEWE project's, was based on an empirical analysis of transition patterns. This distinguished four national configurations which it labelled regulated inclusion (Austria, Denmark, Germany: associated with OLMs), selective exclusion (Italy, Greece: associated with ILMs), selective exclusion tempered by competitive regulation (Finland, France, Sweden: associated also with competitive or secondary labour markets) and composite (Belgium, Ireland, the Netherlands, Spain and the UK). The same study concluded that eastern European countries were tending to move from a model of regulated inclusion to competitive regulation (see also Saar, 2005). However Kogan and Unt (2005, p. 248) are more guarded when they regret the 'lack of a systematic comparative framework' for analysing school-to-work transitions in the central and eastern European countries.

As researchers have compared more countries they have tended to reject dichotomies or simple typologies developed from comparisons of a small number of countries. They have also rejected the notion that most variation in transition systems can be represented by a single over-arching dimension. Research on southern Europe has demonstrated the need to allow for family-related variables, weakly related to any over-arching dimension. Research on central and eastern Europe has shown that typologies also need to take account of market liberalism and labour-market flexibility.

An alternative approach is exemplified by Walther (2006). Drawing on Esping-Andersen's models of welfare regimes, he identifies four transition regimes within the EU: universalistic (Denmark, Sweden), employment centred (France, Germany, Netherlands), liberal (Ireland, UK), sub-protective (Italy, Portugal, Spain). In this holistic approach transition regimes are not defined simply by the nature of education and labour-market institutions, but by the assumptions underlying policy and institutional arrangements and by the transition patterns that result.

Recent research has tended to retreat from its earlier enthusiasm for typologies as a basis for classifying transition systems. The typologies approach faces at least four challenges. First, typologies appeared to be useful when most comparisons covered few countries, but studies of larger numbers of countries have found that a large amount of cross-national variation remains unexplained by any available typology.

The final report of the OECD's Thematic Review, based on a larger number of countries than the interim report cited above, rejected typologies in favour of a 'multi-dimensional approach' (OECD, 2000: 30). The CATEWE project found its typology useful for some purposes but concluded that each country's transition system had unique characteristics that had to be understood in terms of its own internal logic (Smyth *et al.*, 2001). Second, empirical typologies lack robustness. Different studies group countries into different clusters or types depending on the data and the analytical techniques. The main exceptions are the core OLM countries, which tend to form a cluster in most analyses, and pairs of countries (such as the US and Canada, or the UK and Ireland) which are geographically close and have cultural and institutional links. Third, typologies tend to be specific to the purpose for which they are produced. Research has failed to identify a single typology of transition systems that can be used for a wide range of analytical and policy purposes. Finally, transition systems change; the allocation of countries to clusters or types may change over time.

Trends in Policy Analysis: Generic Conditions for Successful Transitions

Earlier, I distinguished three purposes of the concept of transition system in policy analysis: as the policy variable, as the context of policy and as heuristic. There is a tension between the first two purposes. The first purpose suggests that research should aim to identify dimensions of transition systems which contribute directly and independently to successful transitions and which can be changed by policy interventions. However, this ignores the interconnectedness and embeddedness of the different dimensions of transition systems. The second purpose suggests that research should identify different types of systems within which particular policies are effective. However, as we have seen, attempts to construct stable and robust typologies have not been particularly successful. Moreover, treating transition systems as the context of policy becomes problematic if they change over time and if they may be transformed, intentionally or not, by the policies of whose effects they define the context. As a result, over the past few decades policy analysis has moved towards the third purpose, which uses concepts of transition system as heuristic aids to understanding one's own system. There is less optimism that features of successful systems, such as the dual system, can be transferred to other countries, and more recognition of the need to design policies to suit the specific institutions and culture of each country (Ryan, 1999; Smyth *et al.*, 2001).

Another response is summarised in the revised conceptual framework of Figure 2. This addresses change in transition systems by distinguishing the more stable and interdependent 'institutional and structural dimensions' from the more variable and discrete 'policy dimensions'. This distinction can only be a matter of degree and it is represented as a continuum from alterable to stable.

[Figure 2 about here]

Figure 2 also introduces the concept of 'generic conditions for successful transitions'. This concept is implicit in several policy analyses, such as the OECD's (2000) Thematic Review. This identified six 'key ingredients of successful transition systems': a healthy economy; well organised pathways that connect initial education with work and further study; widespread opportunities for workplace experience to be combined with education; tightly knit safety nets for those at risk; good information and guidance; and effective institutions and processes. These conditions for success

apply to all transition systems although the policies required to ensure that they are satisfied may vary across systems. Some academic researchers have proposed similar lists of conditions or functional requirements, but at a high level of abstraction. For example, van der Velden (2001) has developed a framework based on three basic functions of education: the skills production function, the selection function and the allocation function. Such approaches may be criticised as functionalist or reductionist, but they draw attention to the processes by which institutional dimensions have their effects. For example, several dimensions, such as institutional linkages, are in fact multi-dimensional. The same functions may be performed by different types of linkages (Rosenbaum *et al.*, 1990, 1999). From a policy perspective the particular type of linkage is less important than the extent to which (for example) it facilitates clear signals and communications between education and the labour market - in other words, the extent to which it contributes to a particular generic condition for successful transitions.

Transition-System Research: Taking Stock

The research on transition systems has at least four significant achievements to its credit. First, it has demonstrated that transition systems matter. Not only has it revealed continuing country differences in processes and outcomes of transition, but it has shown that these are systematically related to features of national transition systems. The initial hypothesis of 'institutional effects' has been supported. This, in turn, has important implications both for our understanding of social change (typically reinforcing a transformational view of globalisation) and for policy-making in a globalised society. Second, the research has increased our knowledge of countries' comparative transition patterns. It has augmented the information available from cross-national indicators such as those of the OECD and Eurostat, and it has informed and enhanced the indicators themselves. Third, it has identified several important characteristics of transition systems. The dimensions listed above have all, in varying degrees, been tried and tested in research. Fourth, it has helped researchers and policy-makers to gain a better understanding of their own transition systems and their distinctive logics. It has provided conceptual tools for analysing a country's transition patterns and the institutional features which may explain them. It has achieved its heuristic purpose.

However, the research has been less successful in producing general explanations. It has been less successful in explaining the relative importance of different dimensions or how they relate to one another, and it has not been able to choose among the different explanatory models or logics associated with different dimensions. Researchers have drawn on a wide range of theories and conceptual frameworks to develop models of transition systems, but the empirical research has not helped us to choose among these theories and frameworks. The theoretical eclecticism - or confusion - persists. Partly as a result, attempts to develop robust and versatile typologies of transition systems have been only partially successful.

Some limitations of transition-system research reflect the limitations of comparative data. These data typically reflect a narrower concept of education-work transitions than the broad concept favoured by most youth researchers. Most datasets used in comparative transition research cover a relatively short longitudinal span - often restricted to labour-market entry and the first job - and provide little information on transitions in other domains than education and the labour market. They often lack

crucial information on topics as social background, education and skills which are central to the analysis of transitions. These problems are partly addressed by household panel surveys which become more suitable for transition research over time, as they accumulate transition data for sufficient numbers of sample members to make analysis possible.

In addition, much of the research has been based on a limited number and range of countries. Most early studies of transition systems were based on a few large countries such as France, Germany, the US, the UK and Japan. Since the mid 1990s the influence of European Framework programmes and the increased use of the ELFS and ECHP has extended this research to include the former 15 member states of the EU; this has resulted in increased attention to smaller countries and to southern Europe. Only recently have central and eastern European countries received significant attention, encouraged by the module on youth transitions introduced in the 2000 ELFS (eg Kogan and Unt, 2005). Most non-European countries continue to be under-represented in comparative research on transition systems. And as more countries are included, frameworks and typologies developed in relation to a small number of west European and north American societies lose their explanatory power. Similar issues are experienced in other fields of comparative research, such as that on production regimes (Gallie, 2007).

Moreover, the institutional and structural dimensions of transition systems have often been measured in an arbitrary or unreliable way. While the limitations of comparative micro-data have been widely discussed and acknowledged, the limitations of macro-data are at least as serious.

Not all the limitations of transition-system research can be attributed to data and measurement problems. The theoretical and disciplinary diversity of the field, while potentially an advantage, has also been a handicap. It has encouraged a wide range of hypotheses and explanatory models, but it may also have inhibited the development of research approaches which could test alternative explanatory models in order to choose among them.

Among the many challenges for transition-system research is the need to engage with theories of social change and the role of the nation-state. Transition-system research has successfully challenged predictions of national convergence arising from theories of modernisation and globalisation (Müller and Shavit, 1998; Blossfeld *et al.*, 2005). However, its contribution to our understanding of change is essentially negative: it demonstrates the limits of change, that is, the path-dependency of countries and the failure of national transition patterns to converge. But the research reviewed above has shown that transition systems can change; the challenge is to move beyond descriptions of changes in transition systems in order to explain them. Some studies have engaged with more general theories of educational change such as individualisation and risk theories; for example, Blossfeld *et al.* (2005) compare the ways in which global 'uncertainty' is mediated by national institutional filters. However, their approach does not explain how transition systems themselves change. The fact that they have changed most in countries undergoing major social and economic transformations suggests that we should seek explanations from comparative political economy such as the literatures on varieties of capitalism or on

alternative skills strategies for development (Hall and Soskice, 2001; Brown *et al.*, 2001).

A related challenge is to take account of variations within societies and of connections between them. Transition-system research tends to have accepted the nation-state as its unproblematic unit of analysis. Only occasionally has it examined their internal variability, for example regional or national differences within federal or multi-national states such as Belgium, Switzerland or the UK (eg Raffe *et al.*, 2001). And it has tended to conceptualise nation-states ‘in terms of mutually independent, quasi autarkic, and to that extent comparable entities’, a perspective which Schriewer (2006, p. 299) contrasts with a second tradition in comparative research which studies ‘intertwined elements of relations of trans-societal, and ultimately world-historical, interconnection’. It has compared transition systems and measured their similarities and differences but it has not directly examined their mutual influences and interrelationships. One way to explore these interrelationships is through studying circumstances in which the contrasting logics of different transition systems confront each other, such as the large-scale migration and mobility of young people or the operation of multi-national corporations. Such issues provide a rich agenda for the future.

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Notes

1. However, van der Velden and Wolbers (2006) have used the concept of transition system to describe institutional arrangements specifically associated with transition, such as information and guidance services and education-labour-market links. In their case the purpose of the concept is to identify national factors that are distinct from education/training systems and labour markets respectively.

2. It is ironical that Germany and the US have represented the extreme poles of many continua or typologies of transition systems. Both countries have often been seen as sources of policy learning, and even as models to be copied. If policy lessons are more transferable between countries with similar transition systems we would expect countries at either extreme of the continuum to be less commonly chosen as sources of policy learning.

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